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APR 13 2001

TECH CENTER 1600/2900

B1

SEQUENCE LISTING

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<120> NOVEL GENE AND METHOD FOR PRODUCING L-AMINO ACIDS

<130> 0010-1070-0

<140> 09/466,935

<141> 1999-12-20

<150> RU98123511

<151> 1998-12-23

<160> 4

<170> PatentIn version 3.0

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Thr Thr Ser Leu Asn His Gly Tyr Pro Ala Gly Val Tyr Cys Trp
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gct tca gac cgg act ggc gat tca tat tgg gct ggt tgg cgt ggg gtt 736
Ala Ser Asp Arg Thr Gly Asp Ser Tyr Cys Ala Gly Trp Arg Gly Val
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Gly Thr Leu Phe Ser Arg Ser Val Ile Ala Phe Glu Val Leu Lys Trp
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Ala Gly Ala Ala Tyr Leu Ile Trp Leu Gly Ile Gln Gln Trp Arg Ala
80 85 90
gct ggt gca att gac ctt aac tcg ctg gcc tct act caa tcg cgt cga 880
Ala Gly Ala Ile Asp Leu Lys Ser Leu Ala Ser Thr Gln Ser Arg Arg
95 100 105
cat ttg ttc cag cgc gca gtt ttt gtc aat ctc acc aat ccc aaa agt 928
His Leu Phe Gln Arg Ala Val Phe Val Asn Leu Thr Asn Pro Lys Ser
110 115 120
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Ile Val Phe Leu Ala Ala Leu Phe Pro Gln Phe Ile Met Pro Gln Gln
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| Asp Ile Ile Val Met Ile Gly Tyr Ala Thr Leu Ala Gln Arg Ile Ala | | | |
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| cta tgg att aaa gga cca aag cag atg aag gcg ctg aat aag att ttc | | | 1120 |
| Leu Trp Ile Lys Gly Pro Lys Gln Met Lys Ala Leu Asn Lys Ile Phe | | | |
| 175 | 180 | 185 | |
| ggc tcg ttg ttt atg ctg gtg gga gcg ctg tta gca tcg gcg agg cat | | | 1168 |
| Gly Ser Leu Phe Met Leu Val Gly Ala Leu Leu Ala Ser Ala Arg His | | | |
| 190 | 195 | 200 | |
| gca tggaaaataa tgtcggatgc ggcgttaaacg ccttatccga cttactctga | | | 1221 |
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| agacgcgtct | | | 1231 |
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| Thr Leu Ser Pro Gly Ser Gly Ala Ile Asn Thr Met Thr Thr Ser Leu | | | |
| 20 | 25 | 30 | |
| Asn His Gly Tyr Pro Ala Gly Gly Val Tyr Cys Trp Ala Ser Asp Arg | | | |
| 35 | 40 | 45 | |
| Thr Gly Asp Ser Tyr Cys Ala Gly Trp Arg Gly Val Gly Thr Leu Phe | | | |
| 50 | 55 | 60 | |
| Ser Arg Ser Val Ile Ala Phe Glu Val Leu Lys Trp Ala Gly Ala Ala | | | |
| 65 | 70 | 75 | 80 |
| Tyr Leu Ile Trp Leu Gly Ile Gln Gln Trp Arg Ala Ala Gly Ala Ile | | | |
| 85 | 90 | 95 | |
| Asp Leu Lys Ser Leu Ala Ser Thr Gln Ser Arg Arg His Leu Phe Gln | | | |
| 100 | 105 | 110 | |

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Gln Tyr Ile Val Leu Gly Val Thr Thr Ile Val Val Asp Ile Ile Val
145 150 155 160

Met Ile Gly Tyr Ala Thr Leu Ala Gln Arg Ile Ala Leu Trp Ile Lys
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Met Leu Met Leu Phe Leu Thr Val Ala Met Val His Ile Val
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gcg ctt atg agc ccc ggt ccc gat ttc ttt gtc tct cag acc gct 276
Ala Leu Met Ser Pro Gly Pro Asp Phe Phe Phe Val Ser Gln Thr Ala
15 20 25 30

gtc agt cgt tcc cgt aaa gaa gcg atg atg ggc gtg ctg ggc att acc 324

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| tgc ggc gta atg gtt tgg gct ggg att ggc ctg ctt ggc ctg cat ttg | | 372 | |
| Cys Gly Val Met Val Trp Ala Gly Ile Ala Leu Leu Gly Leu His Leu | | | |
| 50 | 55 | 60 | |
| att atc gaa aaa atg gcc tgg ctg cat acg ctg att atg gtg ggc ggt | | 420 | |
| Ile Ile Glu Lys Met Ala Trp Leu His Thr Leu Ile Met Val Gly Gly | | | |
| 65 | 70 | 75 | |
| ggc ctg tat ctc tgc tgg atg ggt tac cag atg cta cgt ggt gca ctg | | 468 | |
| Gly Leu Tyr Leu Cys Trp Met Gly Tyr Gln Met Leu Arg Gly Ala Leu | | | |
| 80 | 85 | 90 | |
| aaa aaa gag gcg gtt tct gca cct gcg cca cag gtc gag ctg gcg aaa | | 516 | |
| Lys Lys Glu Ala Val Ser Ala Pro Ala Pro Gln Val Glu Leu Ala Lys | | | |
| 95 | 100 | 105 | 110 |
| agt ggg cgc agt ttc ctg aaa ggt tta ctg acc aat ctc gct aat ccg | | 564 | |
| Ser Gly Arg Ser Phe Leu Lys Gly Leu Leu Thr Asn Leu Ala Asn Pro | | | |
| 115 | 120 | 125 | |
| aaa gcg att atc tac ttt ggc tcg gtg ttc tca ttg ttt gtc ggt gat | | 612 | |
| Lys Ala Ile Ile Tyr Phe Gly Ser Val Phe Ser Leu Phe Val Gly Asp | | | |
| 130 | 135 | 140 | |
| aac gtt ggc act acc gcg cgc tgg ggc att ttt gcg ctg atc att gtc | | 660 | |
| Asn Val Gly Thr Thr Ala Arg Trp Gly Ile Phe Ala Leu Ile Ile Val | | | |
| 145 | 150 | 155 | |
| gaa acg ctg gcg tgg ttt acc gtc gtt gcc agc ctg ttt gcc ctg ccg | | 708 | |
| Glw Thr Leu Ala Trp Phe Thr Val Val Ala Ser Leu Phe Ala Leu Pro | | | |
| 160 | 165 | 170 | |
| caa atg cgc cgt ggt tat caa cgt ctg gcg aag tgg att gat ggt ttt | | 756 | |
| Gln Met Arg Arg Gly Tyr Gln Arg Leu Ala Lys Trp Ile Asp Gly Phe | | | |
| 175 | 180 | 185 | 190 |
| gcc ggg gcg tta ttt gcc gga ttt ggc att cat ttg att att tcg cgg | | 804 | |
| Ala Gly Ala Leu Phe Ala Gly Phe Gly Ile His Leu Ile Ile Ser Arg | | | |
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Glu Lys Met Ala Trp Leu His Thr Leu Ile Met Val Gly Gly Gly Leu
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Tyr Leu Cys Trp Met Gly Tyr Gln Met Leu Arg Gly Ala Leu Lys Lys
85 90 95

Glu Ala Val Ser Ala Pro Ala Pro Gln Val Glu Leu Ala Lys Ser Gly
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Arg Ser Phe Leu Lys Gly Leu Leu Thr Asn Leu Ala Asn Pro Lys Ala
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Ile Ile Tyr Phe Gly Ser Val Phe Ser Leu Phe Val Gly Asp Asn Val
130 135 140

Gly Thr Thr Ala Arg Trp Gly Ile Phe Ala Leu Ile Ile Val Glu Thr
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Leu Ala Trp Phe Thr Val Val Ala Ser Leu Phe Ala Leu Pro Gln Met
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Arg Arg Gly Tyr Gln Arg Leu Ala Lys Trp Ile Asp Gly Phe Ala Gly
180 185 190

Ala* Leu Phe Ala Gly Phe Gly Ile His Leu Ile Ile Ser Arg
195 200 205